

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, listings of claims in the application:
Listing of Claims:

1-14 (canceled).

15. (currently amended) A system for controlling a drying cycle in a drying apparatus comprising:

a first means for sensing the concentration of a lipophilic fluid vapor present in the drying apparatus;

at least one second means for sensing a condition in the drying apparatus; and

a signal processor operatively connected to said first and second means;

wherein said signal process is configured to compare[[s]] a first signal from said first means against a first threshold value or and a second signal from said second means against a second threshold value.

16. (currently amended) A system according to Claim 15 wherein said first means is configured to cooperate[[s]] with said signal processor to terminate said drying cycle.

17. (currently amended) A system according to Claim 15 wherein said first means is configured to cooperate[[s]] with said signal processor to terminate said drying cycle when the lipophilic fluid vapor concentration is safe for human exposure.

18. (canceled)

19. (currently amended) A system according to Claim 15 wherein said first means is configured to cooperate[[s]] with said signal processor to terminate said drying cycle when the lipophilic fluid vapor concentration in said apparatus is less than about 40 ppm.

20-21. (canceled)

22. (currently amended) A system according to Claim 15 wherein said first means is configured to cooperate[[s]] with said signal processor to terminate said drying cycle when the lipophilic fluid vapor concentration in said apparatus is less than about 10 ppm.

23. (previously presented) A system according to Claim 15 wherein said second means is a sensor selected from the group consisting of a humidity sensor, a timer, a mass sensor, a temperature sensor, a fluid flow sensor, a torque sensor, and combinations thereof.
24. (previously presented) A system according to Claim 15 wherein said first means is of the type selected from the group consisting of reactive sensors, physical property sensors, sorption sensors, and combinations thereof.
25. (previously presented) A system according to Claim 15 wherein said first means is of the type selected from the group consisting of electrochemical sensors, solid state semiconductor sensors, combustible gas sensors, flame ionization detectors, chemiluminescence sensors, nondispersive infrared sensors, spectroscopic sensors, photoacoustic sensors, fiber-optic sensors, microbalance sensors, conductive polymer sensors, elastomer chemiresistor sensors, reactive-gate semiconductor sensors, and combinations thereof.
26. (previously presented) A system according to Claim 15 wherein said first means is capable of sensing a lipophilic fluid vapor selected from the group consisting of a linear siloxane vapor, a cyclic siloxane vapor, or mixtures thereof.
27. (previously presented) A system according to Claim 15 wherein said first means is capable of sensing a lipophilic fluid vapor selected from the group consisting of octamethylcyclotetrasiloxane vapor, decamethylcyclopentasiloxane vapor, dodecamethylcyclohexasiloxane vapor, and mixtures thereof.
28. (previously presented) A system according to Claim 15 wherein said first means is capable of sensing a lipophilic fluid vapor comprising decamethylcyclopentasiloxane vapor.
29. (previously presented) A system according to Claim 15 wherein said first means is capable of sensing a lipophilic fluid vapor comprising decamethylcyclopentasiloxane vapor and is substantially free of octamethylcyclotetrasiloxane vapor.

30. (currently amended) A system for controlling a drying cycle in a dual mode apparatus capable of washing and drying fabrics within the same drum, the system comprising:
a gas sensor for detecting a lipophilic fluid vapor;
at least one condition sensor for sensing a condition in the drying apparatus; and
a signal processor operatively connected to said gas sensor and said condition sensor;
wherein said signal processor is configured to compare[[s]] a first signal from said gas sensor against a first threshold value or and a second signal from said condition sensor against a second threshold value.

31-32. (canceled)

33. (currently amended) A system according to Claim 30 wherein said gas sensor is configured to cooperate[[s]] with said signal processor to terminate said drying cycle when the lipophilic fluid vapor concentration in said apparatus is less than about 40 ppm.

34. (previously presented) A system according to Claim 30 wherein said gas sensor is selected from the group consisting of reactive sensors, physical property sensors, sorption sensors, and combinations thereof.

35. (previously presented) A system according to Claim 30 wherein said gas sensor is capable of sensing a lipophilic fluid vapor selected from the group consisting of a linear siloxane vapor, a cyclic siloxane vapor, or mixtures thereof

36. (previously presented) A system according to Claim 30 wherein said condition sensor is selected from the group consisting of a humidity sensor, a timer, a mass sensor, a temperature sensor, a fluid flow sensor, a torque sensor, and combinations thereof.

37. (previously presented) A system according to Claim 30 wherein said gas sensor is of the type selected from the group consisting of electrochemical sensors, solid state semiconductor sensors, combustible gas sensors, flame ionization detectors, chemiluminescence sensors, nondispersive infrared sensors, spectroscopic sensors, photoacoustic sensors, fiber-optic sensors, microbalance sensors, conductive polymer sensors, elastomer chemiresistor sensors, reactive-gate semiconductor sensors, and combinations thereof.

38. (previously presented) A system according to Claim 30 wherein said gas sensor is capable of sensing a lipophilic fluid vapor selected from the group consisting of octamethylcyclotetrasiloxane vapor, decamethylcyclopentasiloxane vapor, dodecamethylcyclohexasiloxane vapor, and mixtures